Tinker Toy Maker

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A man who makes toys from bric-a-brac,
and devotes his time to making science fun and simple.

Arvind Gupta dips into his *jhola* and brings out an assortment of toys, each more fascinating than the other. An acrobat made with card paper, sticks, and thread; cars made from rubber pieces and buttons; flapping butterflies and flying fish fashioned out of paper; roulette made with discarded refills, rubber, and cardboard; a hand-held generator crafted from a tape recorder motor and LED; matchbox trains; and a matchstick *Mecanno* set. There are lots of other toys in this toy magician's bulging bag—toys you won't find in sparkling toy stores, but simple science-based surprises crafted with lots of imagination and laughter.

This toy maker creates toys from everyday junk—old newspapers, rubber slippers, empty matchboxes, ball pens, refills, bicycle spokes and tubes, photograph film boxes, plastic soda straws, thread, rubber bands, thread reels, broomsticks, toothpaste tubes, ice cream sticks, and a whole lot of other things we usually throw away.

"The material used for making toys varies. I use natural objects like seeds, thorns, leaves, and twigs while making toys for children in rural areas, whereas old photocopy paper, film boxes, and Tetra Paks are easier to get in cities," explains Arvind. He feels there is something addictive about the simplicity and innovation behind designing toys from trash.

He follows Rabindranath Tagore's saying that the best toy is the one that is incomplete, and which the child completes with her participation. Arvind makes simple toys with which children can play, experiment, and then finally break to assuage their curiosity.

"In the long run, it is not the energy-guzzling toys that will last. These inexpensive, eco-friendly toys are more sustainable," he points out.

Arvind cultivated the habit of tinkering with odds and ends in his childhood. "I used to spend hours making things with pieces of trash. My mother never interfered with my tinkering, and let me be in my own world," he says.

Born into a family that had scant resources to give its four children, Arvind earned to do more with less. Though the resources were few,

there was no dearth of creativity or encouragement. “I grew up in a small town in UP, where my father ran a soap factory and my mother was a housewife. Though my parents never went to school, they gave us the best possible education,” says Arvind.

He excelled in school and studied electrical engineering at 11T (Kanpur). He went on to work for TELCO. But this avid reader had a lot of questions he wanted to find answers to. So, after two years at TELCO, he took a year’s study leave to work with the Hoshangabad Science Teaching Programme (HSTP), Madhya Pradesh. The whole idea of this programme was to revitalize school science, to replace rote learning by science activities and Arvind discovered that this was what he wanted to do for the rest of his life.

“The very first month, I designed the *Matchstick Mecanno* using matchsticks as members and bits of cycle value tube as joints. This enthralled me and I thought I could use my training and skills to make science fun for children,” says Arvind, smiling.

He has been doing exactly this since 1978. He now works in a children’s science centre incubated by IUCAA where, along with a team of like-minded people, he conducts hands-on workshops for school children to nurture their love of science and simplicity. The happiness on the children’s faces and the gleam in their eyes after making scientific *to*ys is a sight to behold.

Apart from making toys, Arvind Gupta also translates books for children into Hindi. “There are very few good books in Hindi, So I translate books everyday for a few hours, make them into PDF files and upload them on my website for everyone to access,” he says. This engineer, toy maker and translator also writes books on creative science activities. These books have been translated into several regional languages and sell like hot cakes. That’s not all. Arvind Gupta has made over a hundred educational films on science toys and teaching aids that have been broadcast on Doordarshan.

A deserving winner of the Award for Science Popularisation, Arvind Gupta nurtures the love of science, a subject that usually intimidates many, and spreads the joy of creating something scientific and fun out of objects we discard without thought into the dustbin.

Here’s to a man who dreams of a peaceful and joyous world!

To learn more about Arvind Gupta’s innovative toys and stories, please visit his website: http://arvindguptatoys.com